

NATIONAL AGRICULTURAL
SAMPLE CENSUS
1993/94.

PHASE 1

NOVEMBER 1996.

PREFACE

The Federal Office of Statistics (FOS) is delighted to publish the result of the Phase 1 of the National Agricultural Sample Census (NASC) 1993/94. The office has also published State results which give agricultural indicators at the Local Government Level.

This report gives a look of the structure of agricultural activities in the country. Planners, Researchers and other users will find the data very useful. The Phase 11 which examines the production of major crops in Nigeria and the area under cultivation will be published later.

The Office would welcome a feed back from users of this report. Every effort has been made to eliminate errors as much as possible, but users may still comment on areas that may appear incorrect or inconsistent.

The FAO technical support during this project is highly appreciated.

O. O. AJAYI

DIRECTOR GENERAL

FEDERAL OFFICE OF STATISTICS.

TABLE OF CONTENTS

	Pages
Table of Contents	i-ii
List of Figures	iii
List of Tables	iii
Chapter 1	1
1.1 Introduction	1
1.2 Pretest 1992/93	1
1.3 Main Census Design	3
1.4 Coverage	3
1.5 Sample Design	4
1.6 Data Collection	4
1.7 Training	5
1.8 Data Processing	7
1.9 Survey Instruments	7
1.10 Spot and Quality Checks	8
1.11 Consistency Checks	9
1.12 National Technical Committee of The Census	9
1.13 Census Monitoring Committee	9
1.14 FAO Assistance	10
Chapter 2	11
Sample Selection and the Association Problem	11
Chapter 3	14
3.1 Introduction	15
3.2 Intensity of Agriculture	16
3.3 Kind of Agricultural Activity	18
3.4 Crop Grown	18
3.5 Livestock and Poultry	20
3.6 Characteristics of Holders	20
3.7 Size of Holding	22
3.8 Use of Fertilizer	23
3.9 Use of Pesticides and Insecticides	25
3.10 Use of Improved Seedlings	27
3.11 Livestock Vaccine Drugs and Supplementary Ration	27

3.12	Agricultural and Related Workers	27
3.13	Access to Credit	28
3.14	Land Type	29
3.15	Land Tenure	29
	Appendix I Enumeration Area and Households Selected by States	30
	Appendix II 1993/94 NASC Retrieval Position	31
	Appendix III Person involved in the Census	32
	Appendix IV Zonal/States Coordinators	33
	Summary Indicators.	34
	Household Listing Questionnaire	35
	Holding Questionnaire	41

LIST OF FIGURES

Figures	Pages
1. Intensity of Agriculture	16
2. Intensity of Agricultural - % of Households engaged in Agriculture	17
3. Kind of Agricultural Activity - % of Holdings Engaged in Activity	18
4. Crops Grown - % Holdings Growing Crop	19
5. Livestock and Poultry - % Holding keeping them	20
6. Characteristics of Holders	21
7. Fertilizer	23
8. Use of Fertilizer - % of Holders using fertilizer	24
9. Pesticides and Insecticides	25
10. Pesticides and Insecticides - % of Holders using by State	26
11. Employed Persons	27
12. Credit for agriculture - % of Holder having credit	28
13. Land Tenure Pattern	29

LIST of TABLES

Tables	Pages
1. Household size by State	15
2. Size of Holdings in Hectares by State	22

CHAPTER 1

1.1 INTRODUCTION

FOS first took part in the World Census Agriculture in 1950 and 1960. This was in response to FAO request for all countries to undertake decennial censuses. However, these censuses were not carried out simultaneously in all regions. Since then FOS has carried out two Censuses of Agriculture - 1974/75 and 1984/85. These censuses are generally referred to as The National Agricultural Sample Census (NASC) since a large sample is used to collect information rather than a 100% enumeration of holdings. The type of information collected include: identification, general characteristics, demographic characteristics, land tenure, area planted, crops grown and yield, farm prices, farm inputs, livestock, fisheries and other insular activities. These conform to the categories of items of FAO statistical development series for the programme of World Census of Agriculture. The two series of NASC were successful on data collection and a preliminary report on farm practice had been published. The 1993/94 National Agricultural Sample Census was undertaken by the Federal Office of Statistics (FOS) in collaboration with Federal Ministry of Agriculture, Water Resources and Rural Development. It had technical inputs from FAO

1.2 PRETEST 1992/93

The pretest was in two phases in line with the design anticipated for census. The phase one operation was carried

out in the five pretest states, namely, Anambra, Bauchi, Kano, Osun and Ondo.

The operation involved the complete listing of the housing units and households within units. Farming households which for this purpose include households engaged in crop farming, livestock and fishing were identified from the listing forms. One out of every four farming households was selected for study. A Holding questionnaire which dealt with farm practice and other agricultural structural issues was administered to all selected households. Also the basic questionnaire, that is the General Household Survey questionnaire, dealing with socio-economic activities of the household (health, education, detailed demographic information, housing status, employment, etc) was applied to all selected households.

The three principal objectives of the Census were:

(a) To provide structural data on Agriculture in Nigeria mostly on those aspects that do not change frequently. In the context of this Census, ^agriculture has been defined to include crop production (temporary and permanent), livestock rearing, keeping of poultry, and fishing and forestry.

(b) To obtain the socio-economic activities, health and educational status, detailed demographic and housing status formation on households, household heads and household members. This would provide Local Government Areas with baseline statistics.

(C) To obtain production figures at the state level. The Census was in two phases: the first was to meet its first two objectives while the second phase was to meet its third objective. This report deals only with the phase 1 of the Census.

1.3 MAIN CENSUS DESIGN

The experience from the pretest and the result of the pretest data processing were used extensively to effect changes in the training for census and drafting of the final instruments for the census.

1.4 COVERAGE

Phase 1: The NASC Phase 1 covered 36 EAs in each LGA. At that time, 540 LGAs had been gazetted by the National Population Commission. Of these 18 LGAs on basis of their relative sizes compared to other LGAs in their respective states were split into sub-LGAs each. Therefore, there were 526 strata each with 36 sample Eas giving a total national sample of 20,232 Eas. Out of each EA, 12 household were selected for study giving a total national sample of 242,794 households.

The 540 LGAs gazetted did not reflect the last exercise of Government to creat new LGAs. Therefore some LGAs on the gazette were in fact two or more LGAs on the ground. Since for such LGAs is was not possible at HQ to sort out the frame of Eas into their respective LGAs, it became necessary to select multiples of sample of Eas in the gazetted LGA. The selection of additional Eas was a condition exercise and a total of about 59 additional samples (each of 26 EA's) were added to the 242,784 indicated.

1.5 SAMPLE DESIGN

The Sampling Scheme adopted was a two phase stage sampling selection: Phase One involved three levels ^{of} ~~od~~ stratification.

The ^{basic} ~~baisc~~ objective of Phase 1 was to provide some baseline data on every Local Government Area (LGA) in Nigeria. The LGA thus became the primary of first level of stratification. The EAs in each LGA were stratified into urban or rural, which thus the second level of stratification. Thus, in listing the EAs within each LGA, the urban Eas were listed first, followed by the rural EAs. Systematic ^{sampling.} ~~sampling~~ from the EA list was to ensure that the sample was ^{distributed} ~~disributed~~ between urban Eas in the same proportion as for the whole population, without the need for calculating urban and rural sampling rates separately.

The third level of stratification, again implicitly, reflected general agro-ecological variation. Thus within the rural sector, the listing of EA in each LGA prior to selection was in a serpentine order on the map.

36 EA were to be selected in each LGA using systematic selection with probability proportional to size. 12 households were selected per EA ^{for} ~~foe~~ study, the household being the primary sampling unit.

1.6 DATA COLLECTION:

^{FOS} Data collection was undertaken by enumerators from FOS. FOWS maintains a team of permanent field staff to collect data. The level of education and general development of the country demands this. Enumerators are posted to enumeration areas and live there throughout the period such areas

are studied. Supervisors are based at strategic centres each overseeing the work of the three or four enumerators. Assistant field officers form the next level in the supervisory cadre, three supervisors are supervised by an AFO within each state. There are two or three field officers at the next level to oversee the work of the assistant field officers. The officer is in charge of the work in the state. Each state ^{falls} falls into one of four zones into which the country is divided. There is a zonal controller in each zone.

For the purpose of the census temporary enumerators were recruited to supplement the existing staff. About 4,602 enumerators and supervisors were deployed for the census and data collection took the form of personal interviews.

An enumerator was assigned one EA and a supervisor coordinated a team of 6 enumerators while an editor worked with the supervisor in carrying out field edit on records.

1.7 TRAINING

Nasc was executed in collaboration with the Federal Ministry of Agriculture. Since some of the enumerators were temporary, the content of the questionnaires and manuals were detailed. There was thus the need to ensure that enough time was devoted to training of all categories of staff. There were four levels of training in preparation for the start of NASC in 1993/94.

1st LEVEL: The first level training took place at the Centre for Management Development, Shangisha on the 2nd and 3rd of April 1993.

The trainers were the officers of the Headquarters selected from the Agriculture and Household Statistics as well as the field and Evaluation Departments. The trainers were the Zonal Controller, Zonal Coordinators and State Officers of the pre-test state and some other officers from the Headquarters.

2nd LEVEL: The second level training took place at the Zonal Headquarters: Kaduna for NW zone, Jos for NE zone, Enugu for SE zone and Ibadan for SW zone, from the 12th to 14th of April, 1993.

The trainers were the zonal Controllers with eight Officers from headquarters - complementing the trainers as well as acting as moderators.

The trainers were the state officers, the scrutiny officers and the field officers.

3rd LEVEL: The 3rd level training took place from the 19th to the 22nd of April 1993 in all the headquarters of state offices. All the Supervisors for the Census were trained by those trained during the 2nd level training.

4th LEVEL: The 4th training took place from the 26th to 29th April, 1993. The training was held in at least 3 training centres within the states. All the interviews for the census were trained here by the same trainers at the 3rd level and a few selected supervisors.

STATE STATISTICAL AGENCIES: Training was also conducted for data collection for staff of the Statistical Agencies from 2nd to 5th of June in four zonal offices of the F.O.S.

EDITORS AND CODERS: Also training for coders and editors took place at the Agriculture Survey Division, Lagos from 14th - 25th June, followed by ^{field} practicals for one week. Senior Officers from the Federal Ministry of Agriculture were trained during the 1st level training for the pretest and they were trainers during second level training. They however were unable to take part during the training for the main census.

1.8 DATA PROCESSING: Questionnaires were retrieved from the field for processing at Headquarters. The retrieved questionnaires were first edited and coded manually by trained statistical clerks before being sent to the data entry clerks for computerisation. After data entry had been completed and checked by the programmers, the data diskettes were sent to the Statistician for computer editing and tabulation. The programme for Data Entry was ^{written} written by FOS programmers, while editing and tabulation programmes were written by an FAO Consultant who worked with FOS for about six months. The FAO Consultant did a lot in building computer capability among the staff of the Division. All aspects of Data Processing were carried out by our statisticians and programmers.

1.9 SURVEY INSTRUMENTS

Listing Questionnaire This was used to list households in the selected EA and to obtain data on crops grown, livestock/poultry kept and fishing activities.

General Household Questionnaire This was used for sample household in Phase 1 and contained data on socio-economic characteristics of each member of the household as well as housing conditions for the household.

Holding Questionnaire This was for every holding identified as being operated by a member of the sample households in Phase 1 E.A. Data was collected in respect of general farm practice, area of holding, tenure, use of inputs, farm implements, kinds of livestock/poultry kept, access to credit and marketing channels. Most responses on the questionnaire were precoded using international standard classifications.

1.10 Spot/Quality Checks: Right from the planning stage of the NASC need for control of the quality of the various aspect of the programme was realised. Particular attention was paid to field enumeration, this was one major operation whose activities at every stage were evaluated. Several measures were out in place:

- (I) adequate training of the scrutiny staff.
- (ii) development of appropriate instructions manuals.
- (iii) close supervision and monitoring of file activities.
- (iv) development of editing specification ^{for} ~~for~~ each data collection instruments.
- (v) well documented programme of spot checks and re-interviews.
- (vi) validating checks through the use of data from family

Planing Survey (FPS), Labour Force Survey (LFS) and NASC Phase 11 listing.

The measures here helped to assess fully the quality of the data collected during the field operations.

1.11 Consistency Checks: The office has constituted a group headed by a very senior officer from the Methodology Division to evaluate the degree of consistency of the current census data. This evaluation covered the Listing, Holding and General Household Questionnaires. Agricultural data for the past years were examined to see the extent of compatibility with the current census data.

1.12 National Technical Committee of the Census: A technical committee of the NASC was set up. It was made up of officers from FOS, Federal Ministry of Agriculture and some other relevant agencies. The committee was responsible for the design for the pilot test and some aspects of the draft of the main census questionnaire. The committee could not meet during the actual census exercise due to logistics problems but the Federal Ministry of Agriculture was always informed of the progress of the census.

1.13 Census Monitoring Committee: This was constituted to review and monitor the progress of the census. Members of this committee were senior officers from the Agricultural Statistics Division, Household Statistics Division, Field Operations and Evaluation Department, Planing Division and Data Processing Department. This committee met weekly. The committee was very useful and helped to identify areas requiring intervention at every stage of the exercise.

1.14 FAO Assistance: Although the bulk of funds for the census was provided by the Federal Government, FAO assistance was substantial. Four landcruisers, programmable calculators, weighing scales and computers were provided. A two week consultancy in sampling and design was also provided at the beginning of the census. A Data Processing Consultant was provided for six and a half months. The Consultant not only wrote the editing and tabulation programmes but also trained the statistical staff on interactive editing on the computer. The capability of the FOS programmers on the census was greatly improved by the training they received.

CHAPTER 11

SAMPLE SELECTION AND THE ASSOCIATED PROBLEMS

The methodology of sample ^{selection} selection for NASC was as contained in the survey design by Chris Scott, FAO consultant. The preferred design which had several levels of stratification as state and Local Government had the Local Government further stratified into urban and rural sector, with additional level of stratification, this time implicitly imposed on the rural sector to stratify it by cropping pattern. This design was believed to have the twin advantage of marrying most of what was good in the previous sample while at the same time remaining simple in application with regard to methodology of sample selection and estimation procedure. Over all it was believed that the resulting sample will provide us with better estimate than before.

The following steps were taken in the selection process.

- (I) Stratification or grouping of EAs in each Local Government Areas (LGA) into urban and rural
- (ii) The grouping of area within the rural EAs that produce similar crops together in a systematic manner until all the EAs within the rural sector of each LGA was strung together.
- (iii) The selection of 36 EAs systematically in a continuous manner from each Local Government Area. By this implicit stratification, the urban EAs will

appear in proportion to their weight rural EAs with different cropping will also appear according to their presence or weight.

To facilitate the work a two week training of the staff for the sample selection was put in place. During the period, effort was also intensified to get the EAs frame from the National Population Commission (NPC), it was however, discovered that the format in which the frame was compiled by NPC did not include areas by locality. This made both the distinction between urban and rural EAs blurred and affected rural stratification by crop. At this junction the methodology for sample selection was reviewed. The above method was then replaced by a simple straight forward systematic selection of EAs via the cumulation and selection of households which are contained in the frame as supplied by NPC. Under this method 36 EAs were in most cases systematically selected from each LGA. However, due to the marked difference or variance in the sizes of LGAs, it was decided that some criteria was needed to separate large LGAs from the average ones to avoid some LGAs being relatively over sampled or under sampled, with these 36 EAs were selected in each LGA while 72,108 EAs were selected in large EAs.

Soon after the rule guiding the sample selection for this revised method was established, the proper selection started. Once the initial part of the frame came out of the computer,

the work of selecting the sample was done simultaneously with computer production of the frame.

As the sample list of EAs per state were compiled arrangement was made to collect the corresponding sketch maps from NPC.

There were various problems in the course of compiling the frame for NASC. These were:

- (i) Repeated requests and visits to NPC before the frame from which the sample list of EAs was selected.
- (ii) The frame obtained was somewhat defective and incomplete. It was about 95% complete and listing of EAs did not contain listing of localities.
- (iii) Because of the incompleteness of the frame a few LGAs in a few of the states were missing and so sample list for each LGA could not be obtained. Also the non-listing of EAs by localities in the frame presented some sampling problems leading to the review of the methodology of sample selection.
- (iv) Difficulties arising from further state creation was also encountered but it was easier to resolved since in nearly all cases it was a matter of re-allocation of LGAs within the affected, state, except where they were subdivided and boundaries were not clearly defined.
- (v) Where LGAs were split there was the need to draw additional samples.

CHAPTER III

3.1 INTRODUCTION

Nigeria is one of the largest countries in Africa. It lies wholly within the tropics along the Gulf of Guinea, on the Western coast of Africa. It is bounded on the west by the Republic of Benin, on the north by the Republic of Niger and on the east by the Republic of Cameroon.

A land of lush vibrant vegetation and rolling velds, its climate varies from tropical at the coast to sub-tropical further inland.

Temperature is generally very high and increases as one moves from the southern part of the country resulting in a wide geographical variety in physical features.

The diversified geographical regions provide the country with an almost inexhaustible variety. There are two well marked seasons - the dry season lasting from November to March and the rainy season from April to October. Temperatures at the coast seldom rise above 32°C but humidity can be as high as 95%. The climate is drier further north where extremities of temperature are common.

Nigeria covers a total geographical area of 923,768 square kilometres. The population of the country is put at 88,514,501 (National Population Commission 1991). This population is made up of multi-ethnic groups - the major ones being Hausa, Fulani, Ibo, Yoruba, Edo, Urhobo, Efik, Ijaw, Tiv and Kanuri.

3.2 Household Size

The average household size for the country was about 4.7. Plateau State has the highest figure of 5.57. The lowest figure of 3.26 was reported for Ogun State. Majority of the states in the Northern part of the country had average household size of 5.2 while the average size for the South West states was 3.7.

TABLE 1 HOUSEHOLD SIZE BY STATE

S/N	STATE	HH SIZE
1	Abia	4.67
2	Adamawa	5.01
3	Akwa Ibom	4.71
4	Anambra	4.35
5	Bauchi	5.40
6	Benue	5.20
7	Borno	4.48
8	Cross River	4.99
9	Delta	4.24
10	Edo	4.73
11	Enugu	5.15
12	Imo	4.69
13	Jigawa	5.46
14	Kaduna	5.40
15	Kano	5.49
16	Katsina	5.36
17	Kebbi	4.93
18	Kogi	5.05
19	Kwara	4.31
20	Lagos	3.84
21	Niger	4.71
22	Ogun	3.26
23	Ondo	3.63
24	Osun	3.90
25	Oyo	3.95
26	Plateau	5.57
27	Rivers	5.08
28	Sokoto	4.41
29	Taraba	5.06
30	Yobe	4.45
31	Abuja (FTC)	4.27
	NIGERIA	4.7

Nasc 1993/94

3.3 INTENSITY OF AGRICULTURE

It was observed that 72% of Nigeria households were engaged in agriculture, of these 14% were headed by women. About 69% of the households had one holding each, while about 3% had 2 or more holdings. There was wide variation of figures across the states: in Jigawa and Sokoto States, the figures were as high as 97% and 94% respectively, the figure for Lagos State at the other extreme was 5%. Ogun and Delta States recorded figures of 41% and 49% respectively. The remaining states recorded above 50% engagement in agriculture.

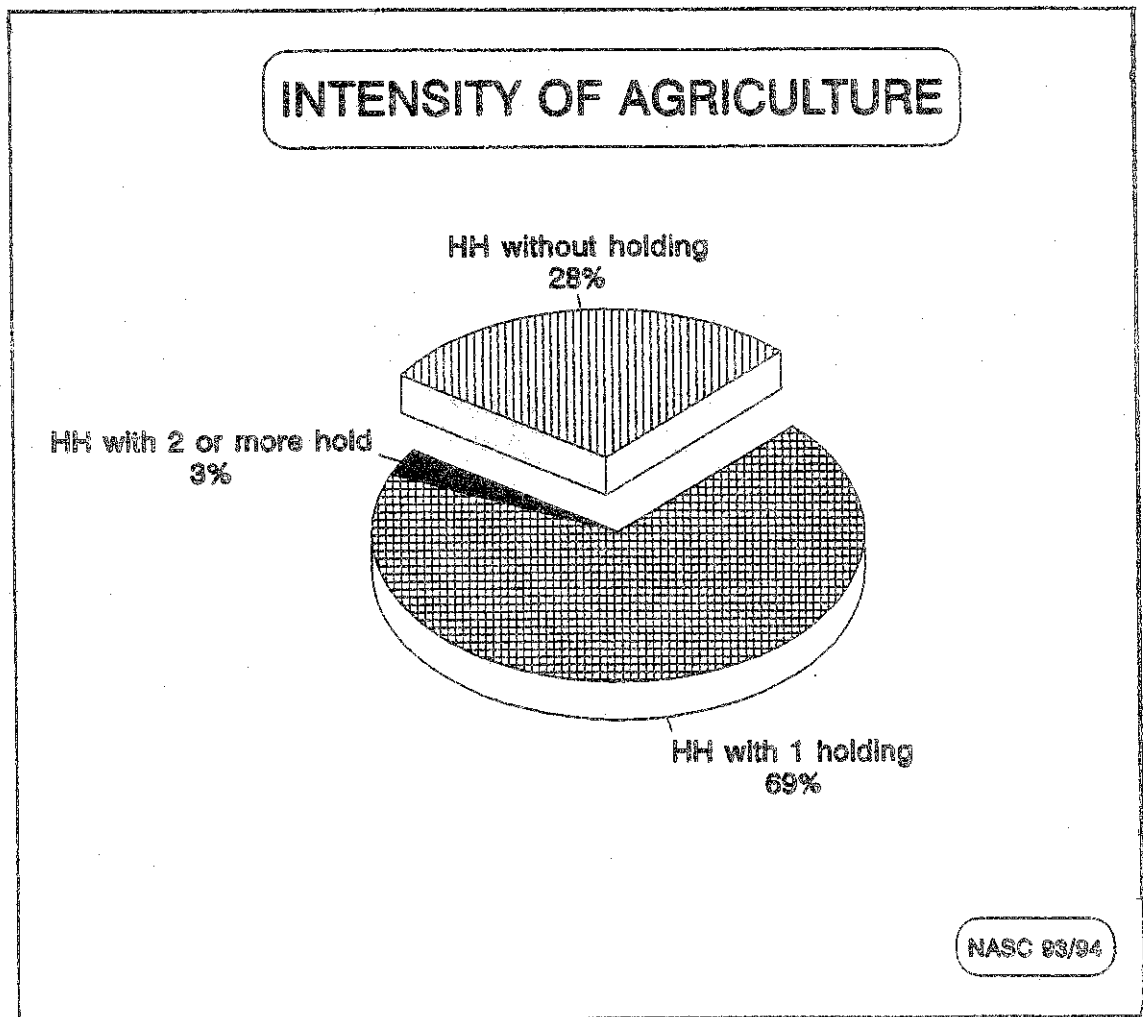
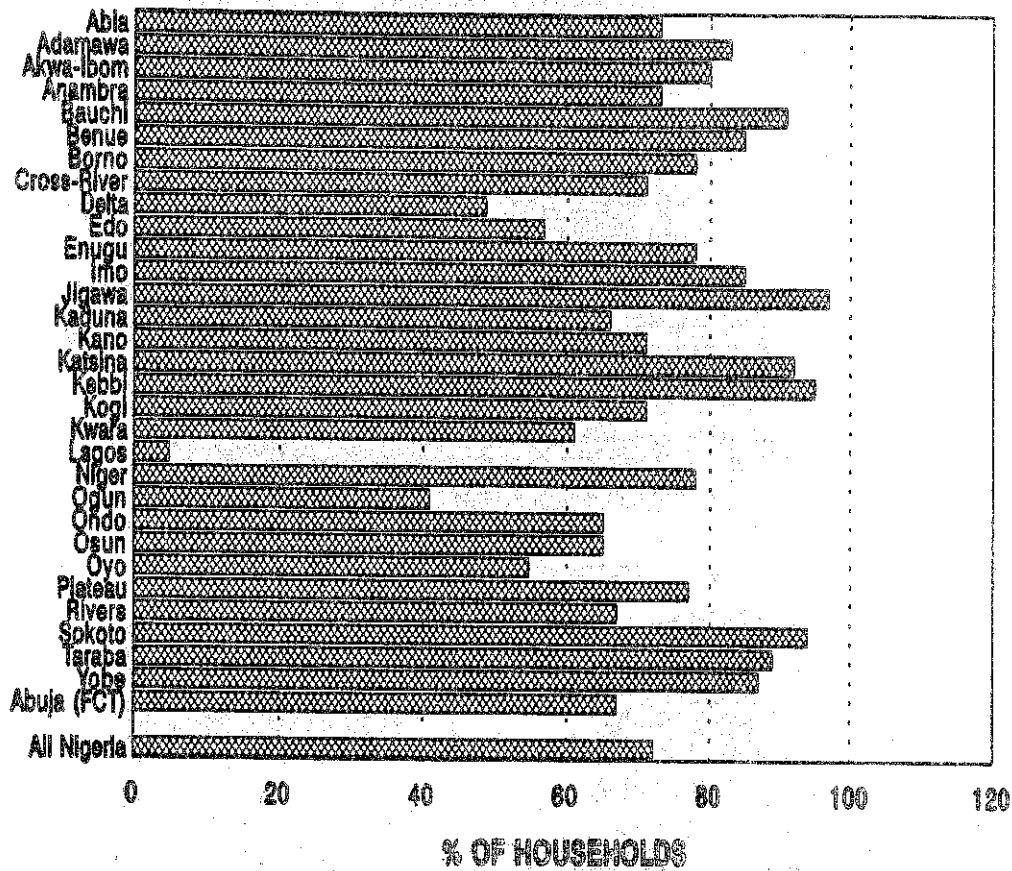


Fig. 1

INTENSITY OF AGRICULTURE

% OF HOUSEHOLDS ENGAGED IN AGRICULTURE

STATE



NASC 93/94

Fig. 2

3.4 KIND OF AGRICULTURAL ACTIVITY

9 out of every 10 (94%) of holdings in the country were involved in crop farming, 70% in livestock farming. Only 2% in fishing and 1% in forestry activities. Many holdings engaged in more than one activity e.g. many holdings had both crop and livestock.

With the exception of Lagos State with 57% of holdings involved in crop farming, all the other state recorded figures above 80%.

High figures of involvement in livestock farming were recorded mostly in the northern part of the country with Kano, Jigawa, Katsina and Bauchi recording 95%, 94%, 91% and 86% respectively.

The lowest figure were 15% in Delta, 27% in Ogun, 36% in Ondo, 40% in Lagos and 41% in Rivers all in southern part of the country.

For fish farming only Delta with 11%, Rivers 10% and Ondo 7% recorded significant figures. All other state recorded figures of about 2% or less.

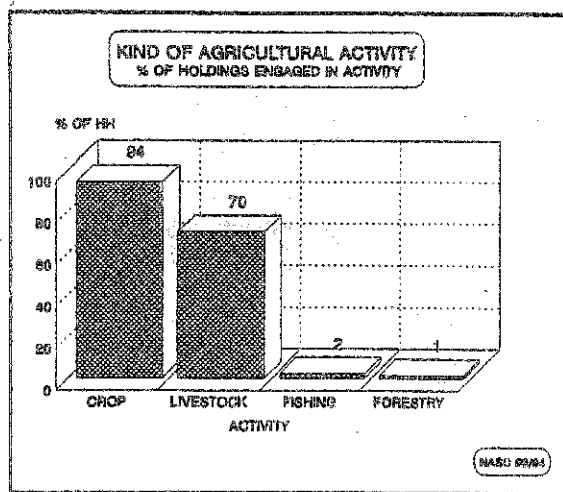


Fig. 3

3.5 CROPS GROWN

Maize was observed to be the crop mostly grown in the country with 54% of all holding in the country cultivating it.

Imo State recorded the highest figure of 93% closely followed by Edo and Anambra with figures of 90% and 89% respectively. Abia recorded 88%. All other state recorded relatively high figures with the exception of Jigawa, Sokoto and Yobe which recorded less than 10% each.

Guinea corn came next with 48% of the holdings cultivating it. The following general pattern of intensity of cultivation of guinea corn emerged from the results. The intensity decreased roughly in terms of its distance from the North. Figures of 90% or more were recorded in the North. In the middle belt, the figures ranged from 60% to 70% whereas the crop was not cultivated at all in some southern state. Cassava followed with 47% of holdings cultivating it. Unlike guinea corn, state in the far north did not cultivate much of it. Yobe, Borno, Jigawa and Katsina all in the far North had low figures of 2%, 3%, 5% and 6% respectively. Cultivation was very intense in the south eastern part with Imo, Anambra, Abia and Akwa Ibom recording 98%, 97%, 93% respectively.

Beans, groundnuts, millet and yam had figures of between 30% and 40% each. Beans, groundnuts and millet were mostly cultivated in the north, yam was mostly cultivated in the middle belt particularly the eastern part.

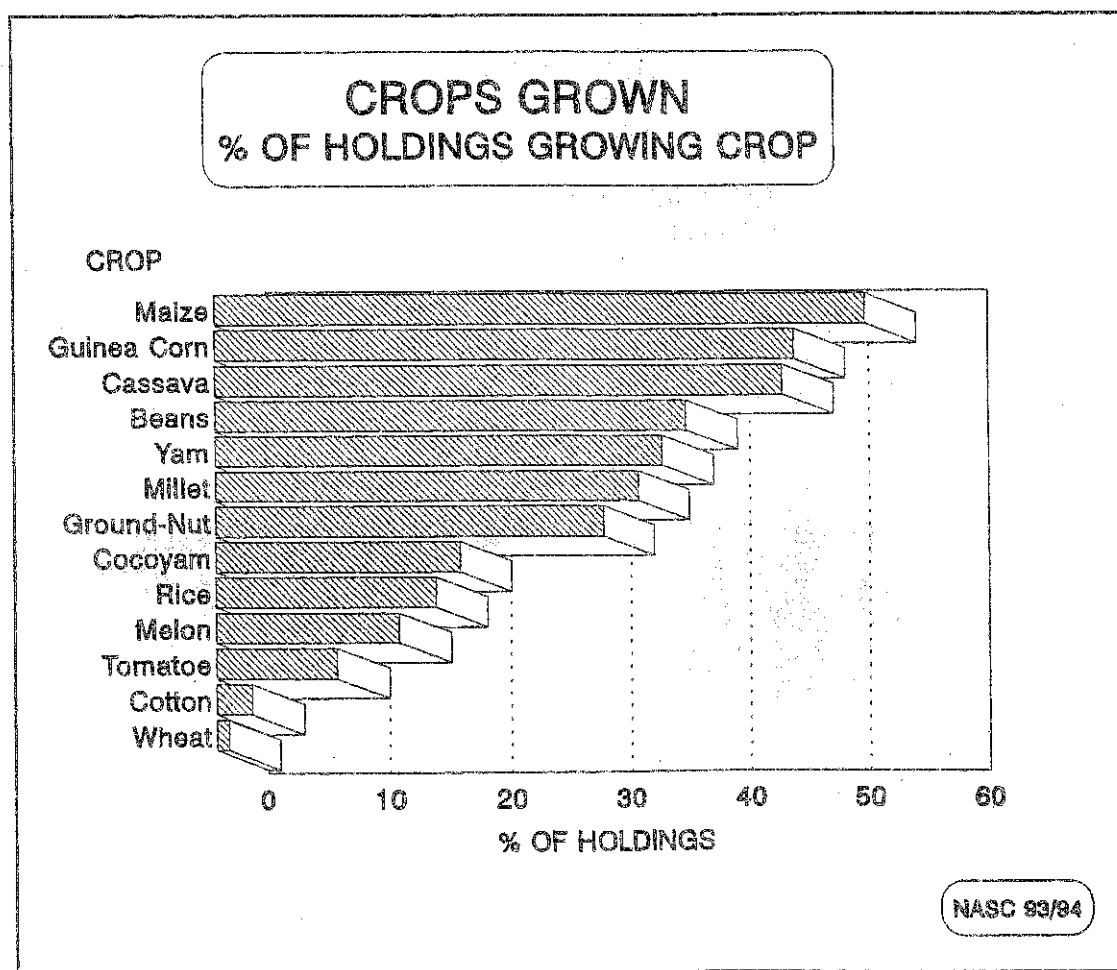


Fig. 4

3.6 LIVESTOCK AND POULTRY

Chicken was observed to be the commonest poultry kept by agricultural holdings in the country with 58% reporting it. 17 states recorded less than 50% involvement in keeping chicken. The highest figure of about 74% came from Benue closely followed by Kano with 73% and Imo with 72%. The lowest figure of 16% was recorded by Ogun and Delta each.

Goat came next in descending order with a figure of 47%. A disaggregation by state showed that Lagos, Ogun and Delta recorded figures below 10%. The highest figure of 78% came from Kano, closely followed by Katsina with 77%.

Sheep followed in that order with 27% the holdings reporting involvement in its keeping. The highest figure of 72% and 70% were recorded by Kano and Jigawa respectively, on the other extreme were Delta and Lagos which recorded figures below 1%.

Cattle was reported by 11% of the holdings. Like sheep, cattle was more dominant in the northern parts of the country.

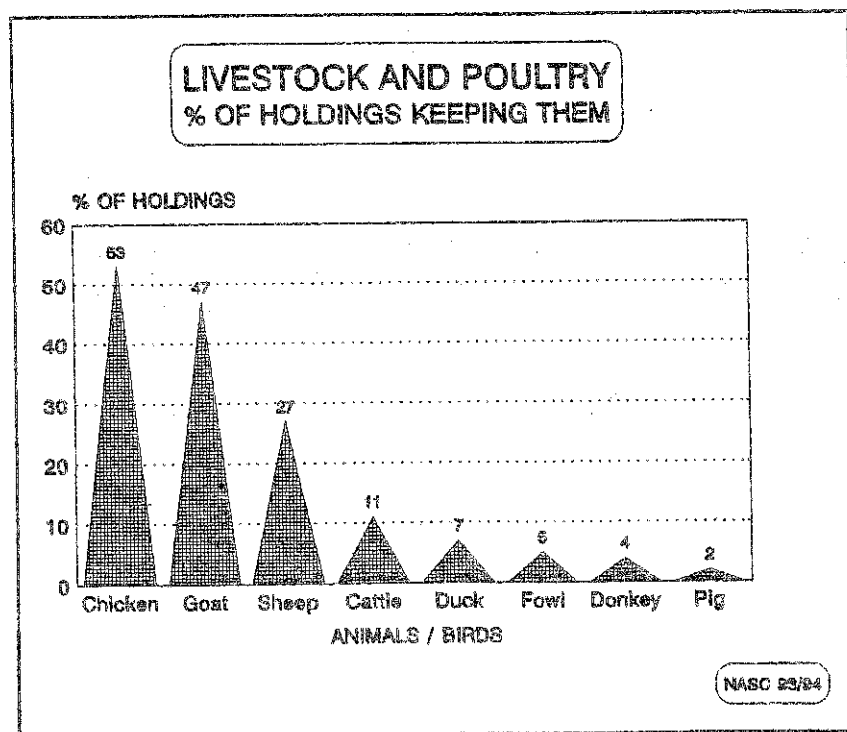


Fig. 5

3.7 CHARACTERISTICS OF HOLDERS

Of all the agricultural holders in the country 87% were men. The holders who were household heads constituted 98%, the remaining

2% were members of households.

The source is Africa

Holder who were aged below 25 years constituted only 3%, 46% were aged between 25 years and 44 years and 33% were between 45 and 59 years. Those aged 60 years and above constituted 18%.

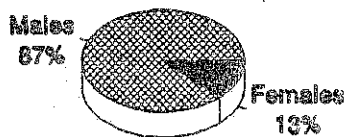
The data disaggregated by marital status showed that 4% of holders were never married, 84% were married and 12% widowed, divorced or separated.

59% of holders had primary education, 28% had secondary education and 9% had post secondary education. 4% never went to school.

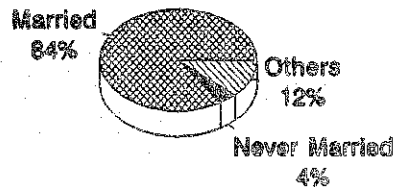
The holders with agriculture as primary occupation constituted 90%, 2% had agriculture as secondary occupation while 8% had agriculture as primary but with other secondary occupation.

CHARACTERISTICS OF HOLDERS

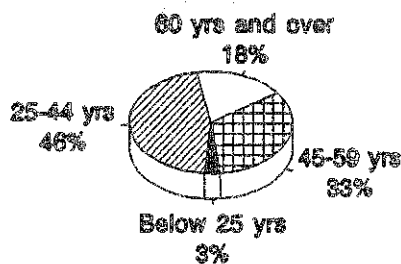
SEX OF HOLDER



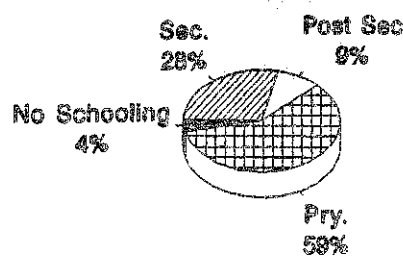
MARITAL STATUS



AGE



EDUCATION



NASC 93/94

Fig. 6

3.8 SIZE OF HOLDING

The average size (area) of holding for the country was 2.54 hectares. Across the state high average sizes of holdings mostly from the northern with Bauchi State having the highest size of 9.9 hectares. Kaduna came next with 8.69 hectares. Borno had 5.48 hectares and Taraba 5.38 hectares. However Kebbi also from the northern part recorded the lowest figure of 0.05 hectares. Akwa-Ibom, Lagos and Rivers also recorded figures of below 1 hectare.

TABLE 2 SIZE OF HOLDING IN HECTARES
BY STATE

S/N	STATE	SIZE OF HOLDING IN HECTARES
1	Abia	0.47
2	Adamawa	0.29
3	Akwa-Ibom	0.28
4	Anambra	1.19
5	Bauchi	9.90 *
6	Benue	2.47
7	Borno	5.48 *
8	Cross River	0.86
9	Delta	0.56
10	Edo	1.14
11	Enugu	1.43
12	Imo	0.79
13	Jigawa	3.81
14	Kaduna	8.69 *
15	Kano	3.00
16	Katsina	5.01 *
17	Kebbi	0.05
18	Kogi	1.33
19	Kwara	1.07
20	Lagos	0.34
21	Niger	2.75
22	Ogun	0.58
23	Ondo	0.84
24	Osun	1.04
25	Oyo	1.27
26	Plateau	4.59 *
27	Rivers	0.48
28	Sokoto	1.50
29	Taraba	5.38 *
30	Yobe	6.52
31	Abuja (FTC)	1.72
	Nigeria	2.54

Nasc 1993/94

3.9 USE OF FERTILIZER

37% of holders used chemical fertilizers. The state figures showed that only Kaduna state with a figure of 88% reported more than 50% of use of fertilizers. Cross River, Ogun, Delta and Edo state recorded figures below 10%. 19% got their supplies from government source, 6% from cooperative societies, 60% from local market and 15% from other sources.

Of non users of chemical fertilizers, 52% had high cost as reason for non use. 23% had source unknown as reason. 12% had not needed. 8% had long distance to procurement centres and remaining 5% had other reasons.

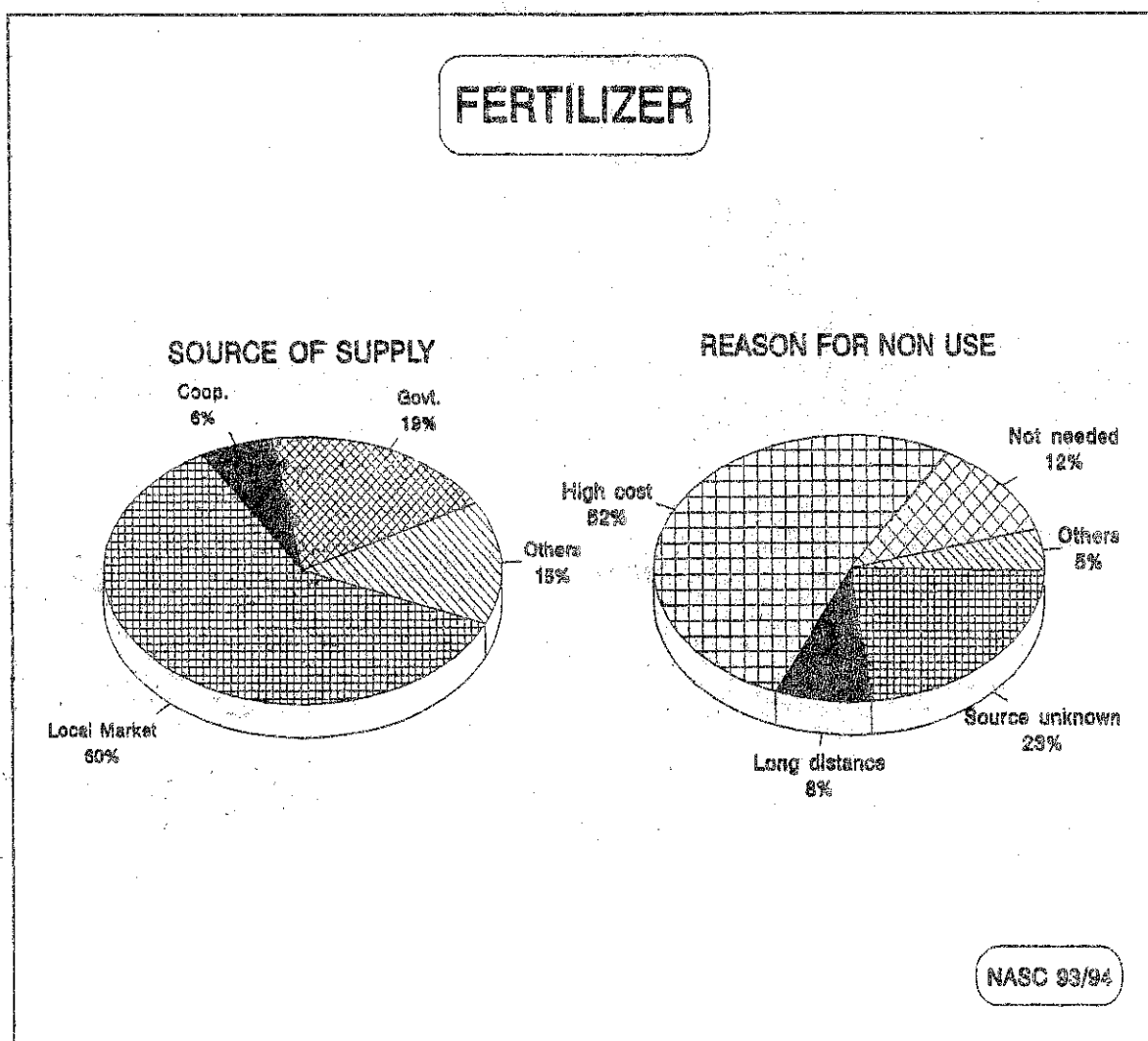
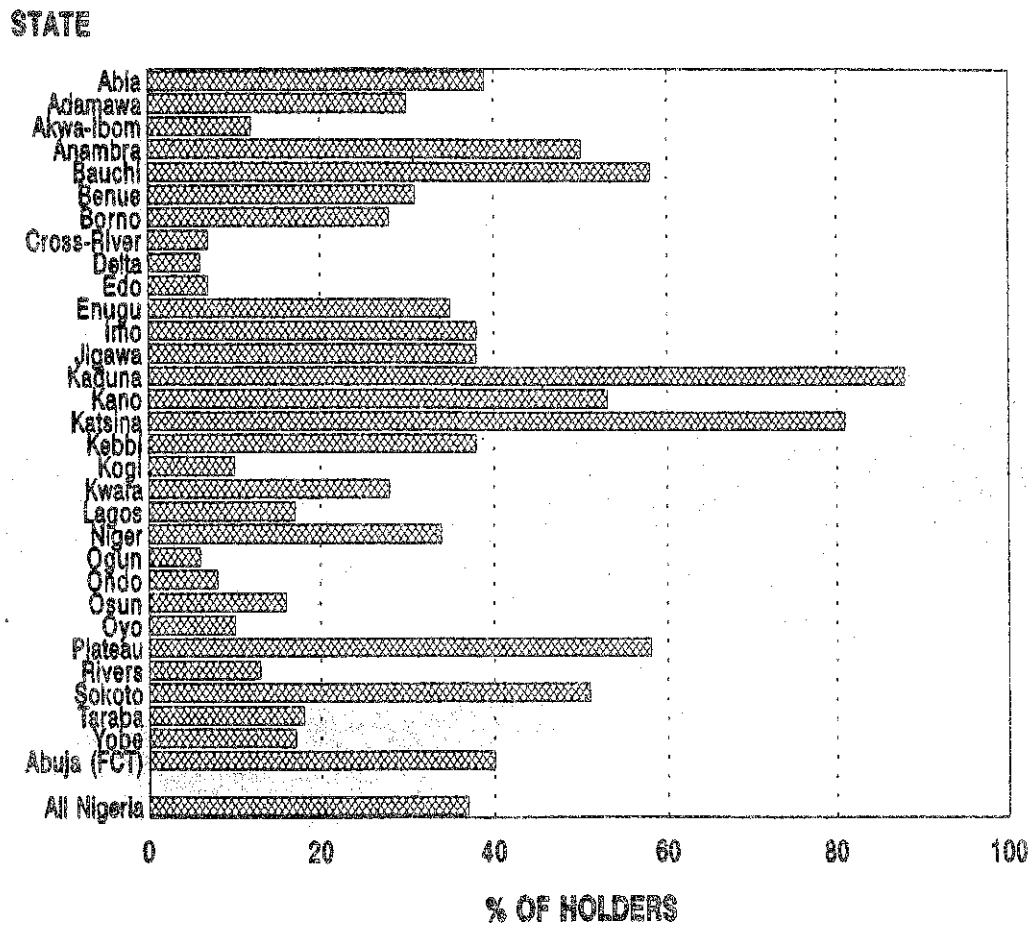


Fig. 7

USE OF FERTILIZER

% OF HOLDERS USING FERTILIZER



NASC 93/94

Fig. 8

3.10 USE PESTICIDES AND INSECTICIDES

It was observed that 90% of holders in the country did not use pesticides or insecticides. With the exception of Katsina which recorded 23% of use, all other state had figures of less than 20%. The state with the highest figures of non use were Akwa-Ibom 99%, Enugu 98%, Edo 97%, Abia 97%, Adamawa, Cross River and FTC each with 95%.

79% of the users of pesticides and insecticides got their supplies from local markets, 17% got theirs from government sources and 4% from other sources.

Of the non users, 40% had high cost as reason for non use, 26% had no need for it, 24% had source unknown as reason for non use and 10% had other reasons.

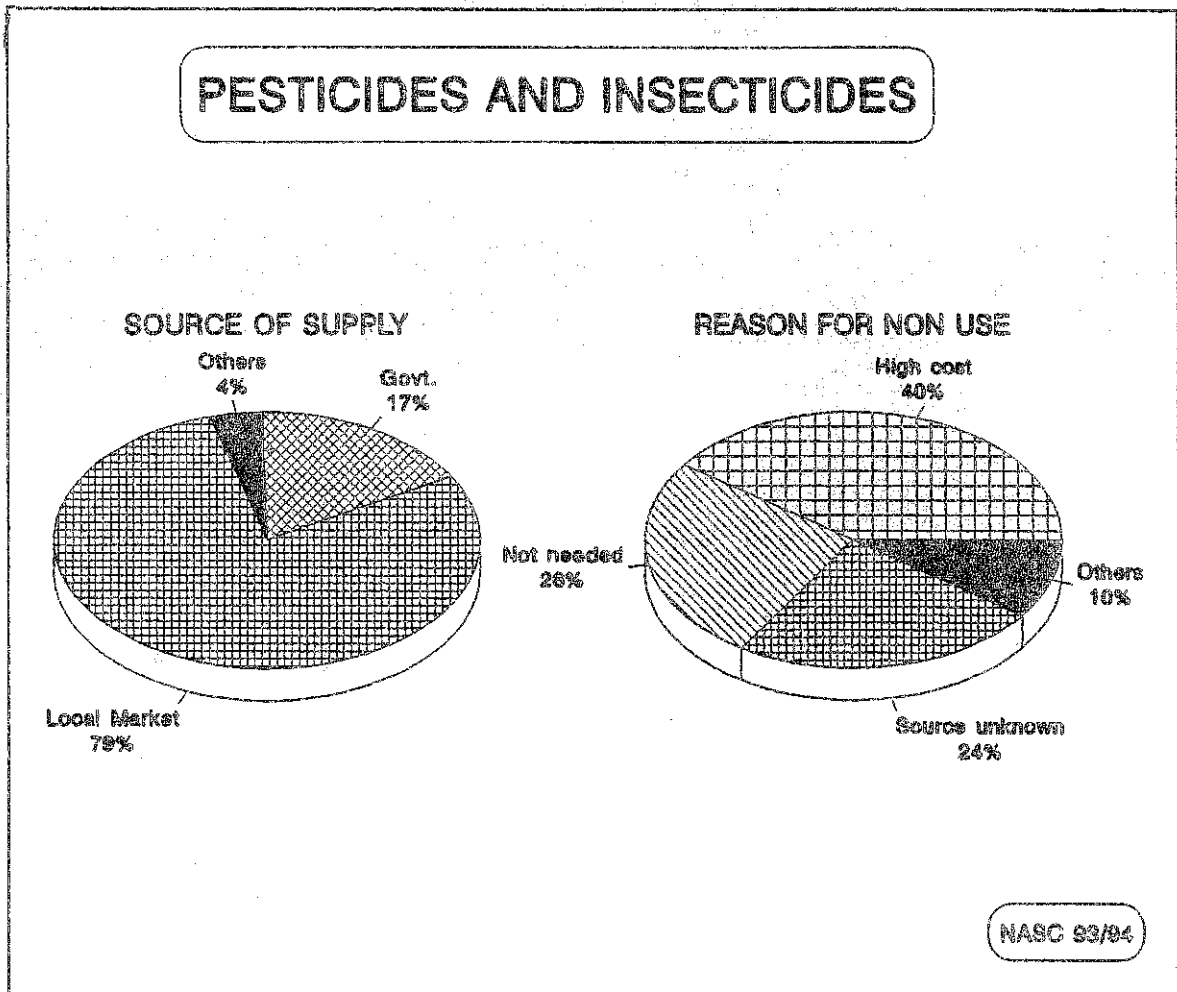
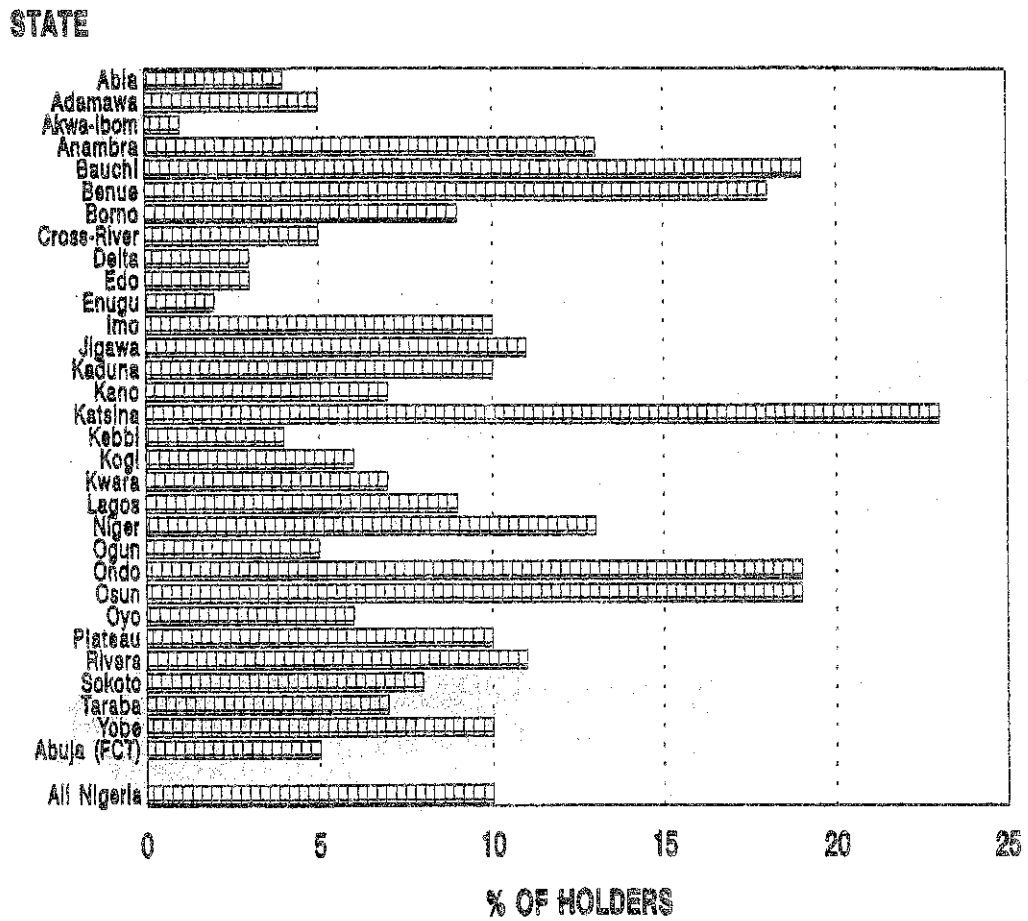


Fig. 9

PESTICIDES AND INSECTICIDES % OF HOLDERS USING BY STATE



NASC 93/94

Fig. 10

3.11 USE OF IMPROVED SEEDLINGS

11% of holders reported using improved seedlings to increase their yield. Of these most (61%) got their supplies from the local market the same common source for fertilizers and pesticides.

Of the non users, 30% had cost as reason for non use, 29% had no need, 28% had source unknown as reason and 12% had other reasons.

3.12 LIVESTOCK VACCINE DRUGS AND SUPPLEMENTARY

99% of the holders were observed not to be using vaccine, 96% were not using drugs and 95% were not using supplementary feeds

3.13 AGRICULTURAL AND RELATED WORKERS

Of the work force in the farm, 21% were holders, 31% of the work force were unpaid family members and 48% were paid workers.

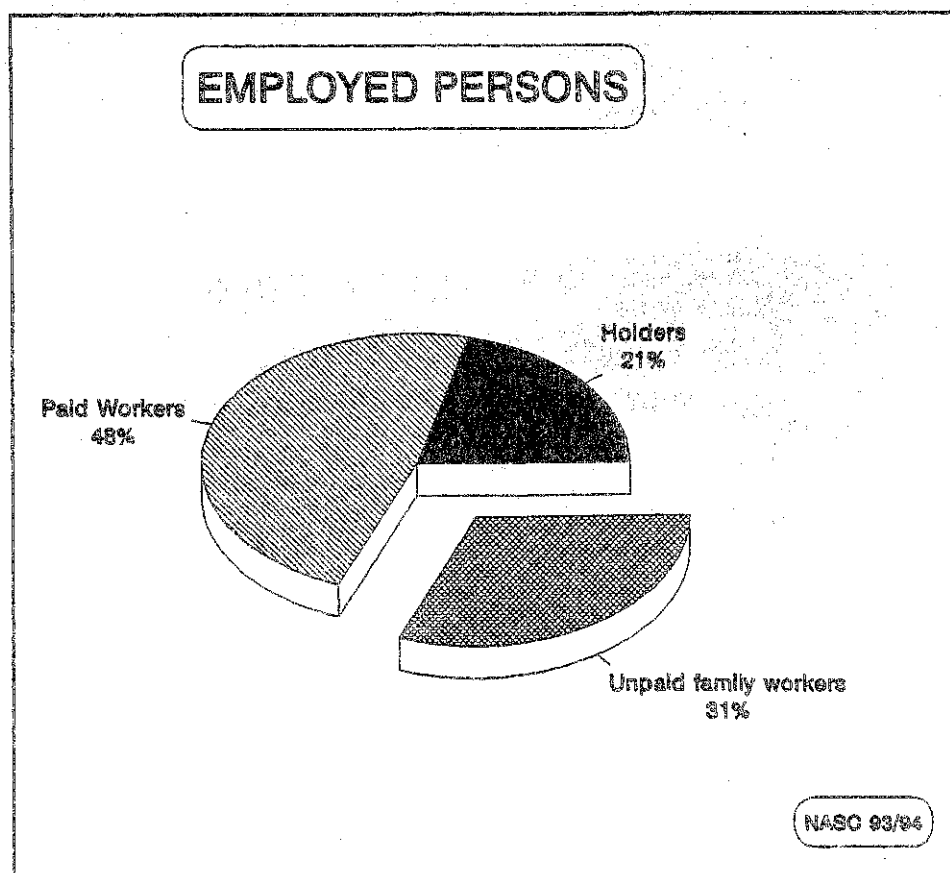


Fig. 11

3.14 ACCESS TO CREDIT

94% of holders had no access to credit for their farm work. 83% of women holders had no credit for their farm work.

Of the holders with access to credit, 90% had it through the formal sector i.e. the banking system and 10% through the cooperative society and informal credit system such as Esusu.

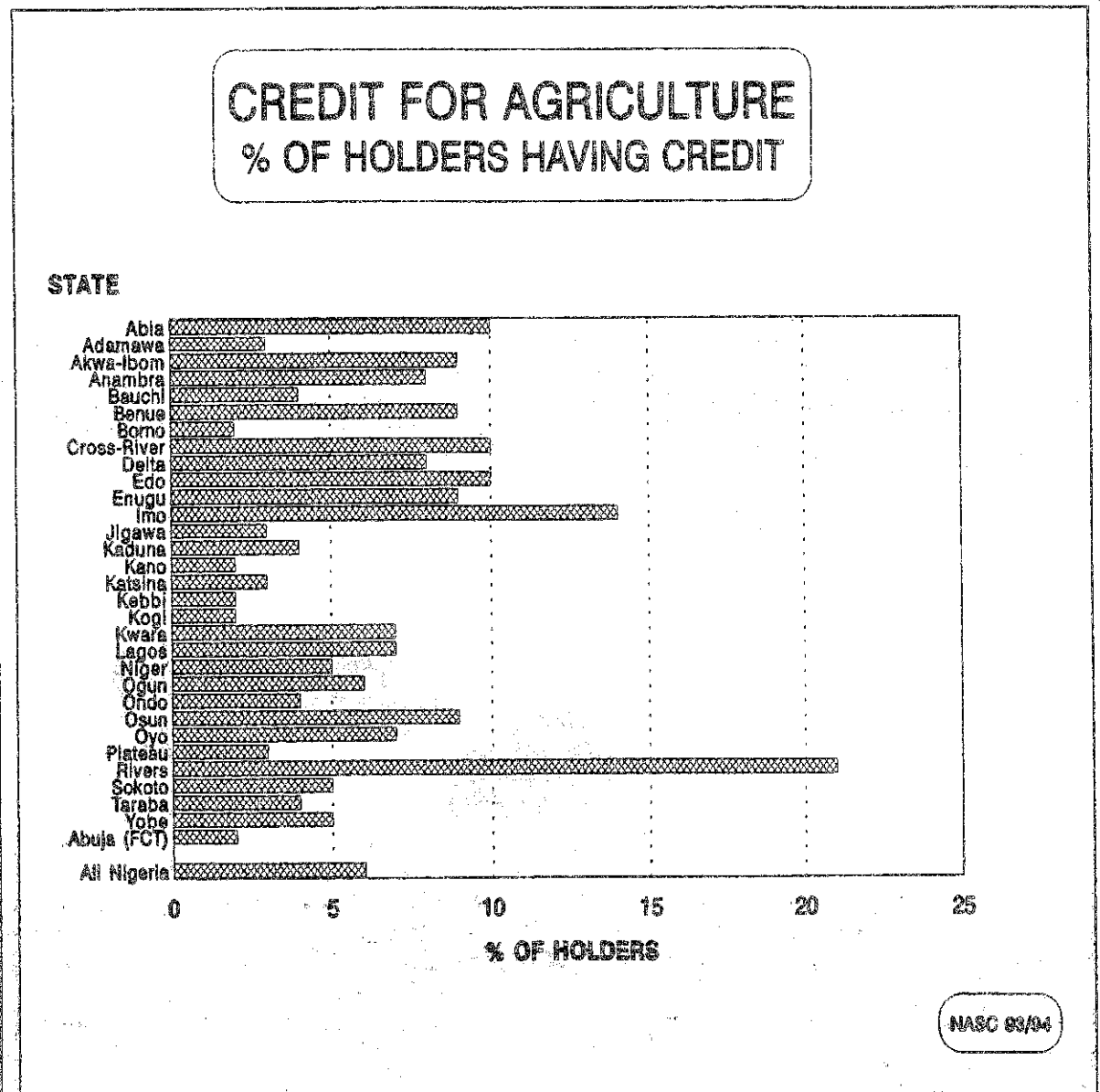


Fig. 12

3.15 LAND TYPE

Holdings on upland i.e. rainfed land type constituted 90%. 15% were on low land i.e. swampy are and 2% on irrigated land. As implied by the figure, some holdings were on multiple land types.

3.16 LAND TENURE

56% of holdings were on land with owner like tenure, 30% were on family land, 9% were on rented land, 3% on squatters land and 2% were on other tenure types.

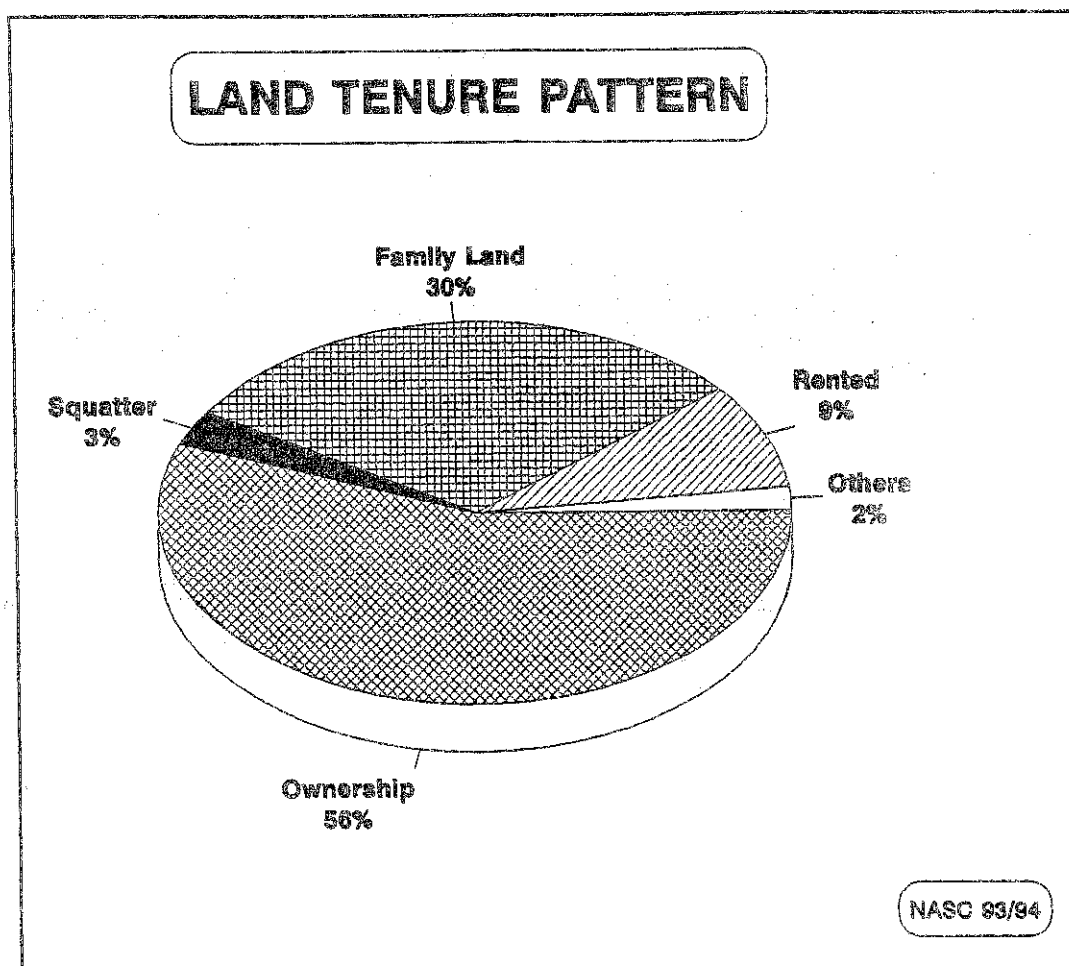


Fig. 13

APPENDIX 1
Enumeration Area and Households
Selected by States

No.	State	No. of EAs	No. of Sample HH
1.	Abia	648	7,776
2.	Adamawa	540	6,480
3.	Akwa-Ibom	864	10,366
4.	Anambra	576	7,912
5.	Bauchi	828	9,936
6.	Benue	648	7,776
7.	Borno	540	6,480
8.	Cross River	540	6,480
9.	Delta	648	7,776
10.	Edo	540	6,480
11.	Enugu	648	7,776
12.	Imo	756	9,072
13.	Jigawa	612	7,344
14.	Kaduna	648	7,776 (12,528)*
15.	Kano	1,044 *	12,528
16.	Katsina	720	8,640
17.	Kebbi	540	6,480
18.	Kogi	612	7,344
19.	Kwara	468	5,616
20.	Lagos	504	6,048
21.	Niger	684	8,208
22.	Ogun	468	5,616
23.	Ondo	936 *	11,232
24.	Osun	822	9,936
25.	Oyo	864	10,368
26.	Plateau	612	7,344
27.	Rivers	729	9,504
28.	Sokoto	1,008 *	12,096
29.	Taraba	504	6,048
30.	Yobe	432	5,184
31.	Abuja	180	2,160
	Total	20,332	232,784

APPENDIX 11
1993/94 NASC Retrieval Position

NO.	State	No. Expected		No. Actually Covered	
		EAs	Household	EAs	Household
1.	Abia	648	7776	645	7594
2.	Anambra	576	6912	546	6135
3.	Akwa-Ibom	864	10368	755	8884
4.	Adamawa	612	7344	553	6383
5.	Bauchi	828	9936	826	9921
6.	Benue	648	7776	628	7673
7.	Borno	828	9936	825	9753
8.	Cross River	540	6480	531	6178
9.	Delta	648	7776	655	7500
10.	Edo	576	6912	540	5958
11.	Enugu	648	7776	658	7767
12.	Imo	756	9072	742	8173
13.	Jigawa	756	9072	745	8484
14.	Kaduna	648	7776	633	7599
15.	Kano	1,244	12528	1221	14086
16.	Katsina	936	11232	928	9260
17.	Kebbi	599	7188	599	7041
18.	Kogi	589	7068	588	7108
19.	Kwara	468	5616	463	4971
20.	Lagos	540	6048	667	6717
21.	Niger	720	6408	667	6717
22.	Ogun	540	5616	525	6235
23.	Ondo	936	11232	914	10195
24.	Osun	828	9936	828	9174
25.	Oyo	900	10800	884	10417
26.	Plateau	828	9936	817	9832
27.	Rivers	900	10800	745	8944
28.	Sokoto	1,044	12096	1033	10394
29.	Taraba	504	6048	502	5956
30.	Yobe	543	6516	537	6495
31.	Abuja	180	2160	174	2351
	Total	21,947	254,816	21,114	243,894

APPENDIX 111

PERSONS INVOLVED IN THE CENSUS

FAO PROJECT CONSULTANT MR. D. ALTMAN

PROJECT DIRECTOR

Mr. J. B. Coker

PROJECT COORDINATOR

Mr. O. A. U. Essien

PROJECT STATISTICIANS

Mr. F. I. Okoukoni

Mr. P. C. O. Okafor

Mr. M. F. Omole

Mr. A. O. Iwegbu

PROGRAMMERS

Mrs. S. M. Akinretoye

Mrs. A. A. Akinsanya

Mr. R. F. Busari

DATA PROCESSING

Mr. O. Monebi

Mr. M. A. Adegboyega

Miss. M. D. Ikuelogbon

Mr. A. E. Udo

Miss. M. T. Kazeem

Miss. I. Kpechi

SOME KEY MEMBERS
OF THE MONITORING COMMITTEE

Alhaji A. Umar

Mr. P. O. Ogbatue

Mr. O. M. Sipasi

Mr. I. O. Ihenacho

Mr. G. O. Adewoye

Mr. J. K. Balogun

Mrs. A. N. Adewinbi

Mr. C. C. Nweze

Mr. F. B. Ladejobi

Mr. A. A. Kehinde

Mrs. A. A. Imolehin

Mr. R. N. Okeke

Mr. A. A. Apata

Mrs. M. A. Babalola

APPENDIX IV

ZONAL COORDINATORS

Mr. O. C. Akinyede	-	North West Zone
Mr. J. O. Nwokedoroku	-	North East Zone*
Mr. A. Idowu	-	South East Zone
Mrs. W. T. Marcathy	-	South West Zone
		North East Zone *

STATES COORDINATORS

South East Zone

Mr. O. E. Okon	-	Akwa-Ibom
Mrs. C. C. Otisi	-	Abia
Mr. H. C. Onaga	-	Anambra
Mr. G. Oparaku	-	Cross River
Mr. A. Onyeaka	-	Imo
Mr. J. O. Elutade	-	Benue
Mr. G. N. Unachukwu	-	Enugu
Mrs. G. I. Ichi	-	Rivers

North East Zone

Mr. L. O. Ugwu	-	Bauchi
Mr. P. S. Abaya	-	Borno
Mr. M. M. Abu	-	Yobe
Mr. A. Aku	-	Taraba
Mr. A. Audu	-	Plateau
Mr. L. L. Gambo	-	Adamawa

South West Zone

Mr. B. Nwokoro	-	Delta
Mr. G. U. Ijewemen	-	Edo
Mr. R. O. Oke	-	Ondo
Mr. S. R. Oladejo	-	Osun
Mr. M. O. Moneke	-	Kwara
Mr. B. Ogunlana	-	Kogi
Mr. F. A. Abioye	-	Oyo
Mr. Opaleye	-	Ogun
Mr. B. O. Awoniyi	-	Lagos

North West Zone

Mr. F. A. Olaniyan	-	Niger
Mr. B. M. Samanja	-	Sokoto
Mr. Raji	-	Kebbi
Mr. S. B. Mogaji	-	Kaduna
Mr. A. O. Oke	-	Kaduna
Malam D. Musa	-	Jigawa
Mr. B. B. Adetimirin	-	Kano
Mr. J. J. Kojusola	-	Abuja

FEDERAL OFFICE OF STATISTICS
 NATIONAL AGRICULTURAL SAMPLE CENSUS 1993/94

PHASE I

HOUSEHOLD LISTING AND MASTER SAMPLE FORM

E.A. Identification

	Name	Code
State		
L.G.A.		
Sector		
E.A.		

Master Sample

MS S/No	HU S/No	HH S/No	Name of Head of HH	Type of Farm					
				(5)		(6)		(7)	
				Crop		Livestock		Fishing	
Yes	No	Yes	No	Yes	No				
01				1	2	1	2	1	2
02				1	2	1	2	1	2
03				1	2	1	2	1	2
04				1	2	1	2	1	2
05				1	2	1	2	1	2
06				1	2	1	2	1	2
07				1	2	1	2	1	2
08				1	2	1	2	1	2
09				1	2	1	2	1	2
10				1	2	1	2	1	2
11				1	2	1	2	1	2
12				1	2	1	2	1	2

* In columns 5-7, circle either 1 or 2 as appropriate

Household Listing

FORM HH

FOS No.	Address of Building	HU S/No.		Name of Head of Household	Does any HH member operate own farm		No. of Holders	If Yes in Col. 6																Poultry																						
		3	4		6	7		Types of Farm Crops Grown								Type of Trees Crops				Types of Livestock																										
								8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43		
																																													Beans	Cassava
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43				
CUMULATIVE TOTAL																																														

Household Listing

FORM EE

ECS No.	Address of Building	HD S/No.	HH S/No.	Name of Head of Household	Does any HH member operate own farm		No. of Holders	Types of Farm Crops Grown														Type of Trees Crops										Types of Livestock						Types of Poultry											
					X	N		Beans	Cassava	Cocoyam	Cotton	Groundnut	Guinea Corn	Maize	Melon	Millet	Rice	Wheat	Yam	Tomatoe	Others	Cocoa	Kolanut	Orange	Palm Trees	Rubber	Coffee	Mango	Plantain	Others	Camel	Cattle	Donkey	Goat	Horse	Pig	Sheep	Others	Duck	Chicken	Guinea Fowl	Others	Pheasant						
					7	8		9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43							
					CUMULATIVE TOTAL																																												

Selection Sheet

Total No. of Household:..... Column:.....
 Date of Selection:..... Sampling Interval:.....
 Page pf Random Table:..... Random Start:.....

M.S. No	Computation of Selection Numbers	Selected HH No.	Name of Head of Household

Enumerator
 Name: _____
 Sign: _____
 Date: _____

Supervisor
 Name: _____
 Sign: _____
 Date: _____

FEDERAL OFFICE OF STATISTICS
NATIONAL AGRICULTURAL SAMPLE CENSUS 1993/94
PHASE I
HOLDING QUESTIONNAIRE

Holding Identification

	Name	Code
State		
L.G.A.		
Sector		
E.A.		

Household Master Sample No..... Age of Holder.....
 No. Of Holders in H/H. Highest level of Educ. Attained...
 Serial No. of this Holding Relation ship to Head of HH.....
 Name of Holder Size of Holder's HH.....
 Sex of Holder

QUES S/NO.	QUESTION AND FILTER	RESPONSE	CODE	SKIP TO
---------------	---------------------	----------	------	------------

SECTION I HOLDING CHARACTERISTICS

1.	Is holding owned by holder (a) As an individual	Yes..... No.....	1 2	
	(b) Jointly with another member of the Household.	Yes..... No.....	1 2	
	(c) Jointly with members of other Households.	Yes..... No.....	1 2	
2.	What agricultural production activities are carried out in the holding (a) Crop farming	Yes..... No.....	1 2	
	(b) Livestock/Poultry (Including Rabbitry)	Yes..... No.....	1 2	

QUESTIONS/NO.	QUESTION AND FILTER	RESPONSE	CODE
	(c) Fish farming	Yes..... No.....	1 2
	(d) Forestry	Yes..... No.....	1 2
3.	Is holding part of an enterprise engaged in other economic activities?	Yes..... No.....	1 2
4.	What is the other major economic activity of the enterprise?	(Specify).....	
5.	Where is holding located?		
	(a) Inside the holder's premises	Yes..... No.....	1 2
	(b) In the field around holder's residence or locality.	Yes..... No.....	1 2
	(c) In a different locality. (but holder has no residence there).	Yes..... No.....	1 2
	(d) In a different locality. (but holder has residence there).	Yes..... No.....	1 2
6.	Does the holder own other holdings?	Yes..... No.....	1 2

SECTION II ACCESS TO LAND

7.	Does any part of your holding (i.e total land for agricultural production) belong to the following categories of tenure? (CIRCLE ALL APPLICABLE)		
	(a) Ownerlike Possession	Yes..... No.....	1 2
	(b) Rented	Yes..... No.....	1 2
	(c) Squatter	Yes..... No.....	1 2
	(d) Family land	Yes..... No.....	1 2
	(e) Others (Specify).....	Yes..... No.....	1 2
8.	Which of the following land types do you use for your farm? (CIRCLE ALL APPLICABLE)		
	(a) Upland (Rainfed).....	Yes..... No.....	1 2
	(b) Lowland (Swampy).....	Yes..... No.....	1 2
	(c) Irrigated.....	Yes..... No.....	1 2

SECTION III

ACCESS TO CREDIT

9.	In running this holding has holder taken any credit (or borrowed money) this agricultural season?	Yes.....	1	11
		No.....	2	
10.	What is the source of fund?	Friends/Relatives	1	
		Community/Peoles		
		Bank	2	
		Agric.Credit Bank	3	
		Other Commercial		
		Fank	4	
		Cooperative Society	5	
Local Money Lender	6			
Traditional Contri- bution (Esusu, etc.)	7			

SECTION IV CROP FARMING

11.	How many crop farm(s) have you already this agricultural season?	Number.....	<input type="text"/>	<input type="text"/>
-----	--	-------------	----------------------	----------------------

12.	What crop(s) (including tree crops) do you already have on your farm(s) this agricultural season? Please tell me the total area planted to each crop in your local unit Do not include scattered crops that are not planted in a regular pattern.	Farm No.	Name of Crop	Area in Local Unit No.	Name of L/Unit	Factor *	Crop Code	Area in Hectare	

AGAINST EACH NAMED CROP(S) ENSURE THAT YOU RECORD THE TOTAL AREA PLANTED (IN LOCAL UNITS) AND THE NAME OF THE LOCAL UNIT.
 * FOR EACH TYPE OF LOCAL UNIT THE SUPERVISOR SHOULD SUPPLY THE NO OF LOCAL UNITS MAKING A HECTARE UNDER THE "FACTOR" COLUMN.

13.	Apart from the farms you are already operating, do you still intend to operate more this agricultural season?	Yes.....	1	16
		No.....	2	

14.	How many farms do you still intend to operate this agricultural season?	Number.....	<input type="text"/>	<input type="text"/>
-----	---	-------------	----------------------	----------------------

15.	What crop(s) (including tree crops) do you still intend to plant this agricultural season? area you intend to plant to each crop in your local unit. Do not include scattered crops that are not planted in a regular pattern.	Farm No.	Name of Crop	Area in Local Unit No.	Name of L/Unit	Factor *	Crop Code	Area in Hectare	

AGAINST EACH NAMED CROP(S) ENSURE THAT YOU RECORD THE TOTAL AREA PLANTED (IN LOCAL UNITS) AND THE NAME OF THE LOCAL UNIT.
 * FOR EACH TYPE OF LOCAL UNIT THE SUPERVISOR SHOULD SUPPLY THE NO OF LOC UNITS MAKING A HECTARE UNDER THE "FACTOR" COLUMN.

QUESTIONS/NO.	QUESTION AND FILTER	RESPONSE	CODE	E	
16.	Do you use the following implement for ploughing? (a) Hoe/cutlass (b) Animal Drawn Plough (c) Motorised plough (d) Others (Specify)	Yes..... No..... Yes..... No..... Yes..... No..... Yes..... No.....	1 2 1 2 1 2 1 2		
17.	Do you use the following implement for Harvesting? (a) Hoe/cutlass (b) Combined Harvester (c) Others (Specify)	Yes..... No..... Yes..... No..... Yes..... No.....	1 2 1 2 1 2		
18.	Which of the following is your <u>main</u> source of ploughing and harvesting implement?	Government Open market..... Cooperative..... Others(Specify).....	1 2 3		
19.	Do you use the following transportation means for your farm produce? (a) Truck/Pickups (b) Motor cycle (c) Bicycle (d) Boats (e) Donkey (f) Head carrier (g) Others (Specify)	Yes..... No..... Yes..... No..... Yes..... No..... Yes..... No..... Yes..... No..... Yes..... No.....	1 2 1 2 1 2 1 2 1 2 1 2		
20.	Do you sell any part of your farm produce?	Yes..... No.....	1 2		
21.	How many people regularly work on your holding(s)? (RECORD THE NUMBER OF MALE (M) OR FEMALE (F) ACCORDINGLY)	Holder..... Unpaid HH member Paid worker		M	F
SECTION V USE OF FERTILIZER					
22.	Have you used fertilizer on any of your farms this agricultural season?	Yes..... No.....	1 2		26

ES NO.	QUESTION AND FILTER	RESPONSE	CODE	SKIP TO
23.	What types of fertilizer have you used? Chemical Fertilizer Farm Manure	Yes..... No..... Yes..... No.....	1 2 1 2	
24.	What is your <u>main</u> source of supply of chemical fertilizer (PLEASE TICK ONE OPTION)	Min. (Ext.service) River Basin Auth. Agro Serv. Centre Farm Serv. Centre Co-operative Soc. Local Market Others (Specify)...	1 2 3 4 5 6	
25.	How far do you usually go to obtain this Chemical fertilizer? (PLEASE TICK ONE OPTION)	Within the locality Outside locality -but less than 10km -more than 10km but less than 100km -more than 100km	1 2 3 4	<u>27</u> <u>27</u> <u>27</u> <u>27</u>
26.	What is your main reason for not using fertilizer? (PLEASE TICK ONE OPTION)	Doubt its effectiveness ... Too costly to obtain Too far to obtain Don't know where to obtain it Never heard of it.. Don't need it Others (Specify)....	1 2 3 4 5 6	

SECTION VI USE OF PESTICIDES/INSECTICIDES

27.	Have you used Pesticides on any farm(s) this agricultural season?	Yes..... No.....	1 2	<u>30</u>
28	What is your <u>main</u> source of supply? (PLEASE TICK ONE OPTION)	Min.(Ext. Services) River Basin Auth. Agro Service Centre Farm Service Centre Co-operative Society Local Market Others (Specify)...	1 2 3 4 5 6	
29.	How far do you usually go to obtain the Pesticides?	Within the locality Outside locality -less than 10km.... -more than 10km but less than 100km -more than 100km....	1 2 3 4	<u>31</u> <u>31</u> <u>31</u> <u>31</u>

QUEST. NO.	QUESTION AND FILTER	RESPONSE	CODE
30.	What is your <u>main</u> reason for not using Pesticides? (PLEASE TICK ONE OPTION)	Doubt its effectiveness..... Too costly to obtain Too far to obtain... Don't know where to obtain it..... Never heard of it... Don't need it.. Others (Specify)....	1 2 3 4 5 6

SECTION VII USE OF IMPROVED SEEDLING

31.	Have you used Improved Seedling on any of your farm(s) this agricultural season?	Yes..... No.....	1 2
32.	What is your <u>main</u> source of supply?	Min, (Ext. Services) River Basin Auth. Agro Service Centre Farm Service Centre Co-operative Societ Local Market Others (Specicy)	2 3 4 5
33.	How far do you usually go to obtain the Improved Seedling?	Within the locality Outside locality -less than 10km -more than 10km but - less than 100km... -more than 100km ...	1 2 3 4
34.	If you are not using improved seedling, indicate which of these reasons is <u>mainly</u> responsible (PLEASE TICK ONE OPTION)	Doubt its effectiveness..... Too costly to obtain Too far to obtain... Don't know where to obtain it..... Never heard of it... Don't need it..... Others (specify)....	1 2 3 4 5 6

SECTION VIII LIVESTOCK AND POULTRY

35.	Do you keep any Livestock which are owned by holder's household?	Yes..... No.....	1 2																		
36.	Do you keep any Livestock which belongs to members of other household?	Yes..... No.....	1 2																		
37.	Give the total number of each type of livestock kept in this household.	<table border="1"> <thead> <tr> <th rowspan="2">Type of Live-stock</th> <th rowspan="2">Code</th> <th colspan="2">Quantity</th> </tr> <tr> <th>M</th> <th>F</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Type of Live-stock	Code	Quantity		M	F													
Type of Live-stock	Code	Quantity																			
		M	F																		
38.	Do you vaccinate your Animals?	Yes..... No.....	1 2																		

QUES I/NO.	QUESTION AND FILTER	RESPONSE	CODE	SKIP TO																						
39.	Who does the Vaccination?	Government. Private Vet. Others (Specify)..	1 2 3																							
40.	Does your Household keep any poultry?	Yes..... No.....	1 2	44																						
41.	If any poultry is kept in this holding, indicate the total number of each kept.	<table border="1"> <thead> <tr> <th rowspan="2">Type of Poultry</th> <th rowspan="2">Code</th> <th colspan="2">Quantity</th> </tr> <tr> <th>Male</th> <th>Female</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	Type of Poultry	Code	Quantity		Male	Female																		
Type of Poultry	Code	Quantity																								
		Male	Female																							
42.	Do you vaccinate your Birds?	Yes..... No.....	1 2	44																						
43.	Which of the following is your <u>main</u> source of supply of vaccine?	Government Open market..... Cooperative..... Private Vet..... Others (Specify).....	1 2 3 4																							
44.	Do you use veterinary Drugs on your Animals/Birds apart from vaccination?	Yes..... No.....	1 2	46																						
45.	Which of the following is your <u>main</u> source of supply of Veterinary drugs?	Government Open market..... Cooperative..... Private Vet..... Others (Specify).....	1 2 3 4																							
46.	Do you feed your livestock/birds with Supplimentary ration?	Yes..... No.....	1 2	48																						
47.	Which of the following is your <u>main</u> source of supply of Supplimentary feed?	Government Open market..... Cooperative..... Private Vet..... Others (Specify).....	1 2 3 4																							
SECTION IX ANCILLARY ACTIVITIES																										
48.	Is any fish farming carried out in this holding?	Yes..... No.....	1 2	52																						
49.	What type of fish farming does this holding engaged in?	Marine Fishing..... Fresh Water (i.e Rivers)..... Lake Fishing..... Pond	1 2 3 4																							

QUEST E/NO.	QUESTION AND FILTER	RESPONSE	CODE														
50.	How many of the following items does the holding possess? (READ OUT THE ALTERNATIVE TO THE INFORMANT AND FILL IN THE QUANTITY SUPPLIED)	<table border="1"> <thead> <tr> <th data-bbox="1054 241 1423 275">Equipment</th> <th data-bbox="1428 241 1538 275">Code</th> </tr> </thead> <tbody> <tr> <td data-bbox="1054 309 1423 342">Motorised Boat</td> <td data-bbox="1428 309 1538 342"></td> </tr> <tr> <td data-bbox="1054 342 1423 376">Boats not motorised</td> <td data-bbox="1428 342 1538 376"></td> </tr> <tr> <td data-bbox="1054 376 1423 409">Nets - Long.....</td> <td data-bbox="1428 376 1538 409"></td> </tr> <tr> <td data-bbox="1054 409 1423 443">Nets Round</td> <td data-bbox="1428 409 1538 443"></td> </tr> <tr> <td data-bbox="1054 443 1423 477">Hooks.....</td> <td data-bbox="1428 443 1538 477"></td> </tr> <tr> <td data-bbox="1054 477 1423 510">Others (Specify)</td> <td data-bbox="1428 477 1538 510"></td> </tr> </tbody> </table>	Equipment	Code	Motorised Boat		Boats not motorised		Nets - Long.....		Nets Round		Hooks.....		Others (Specify)		
Equipment	Code																
Motorised Boat																	
Boats not motorised																	
Nets - Long.....																	
Nets Round																	
Hooks.....																	
Others (Specify)																	
51.	Does this holding normally operate its boat(s) under the sole control of the holder or in corporation with other persons?	Sole 1 Joint Operation... 2															
52	Do you have forest trees on your farm(s)?	Yes..... 1 No..... 2															
53.	Indicate the use(s) to which you put the forest product? (CIRCLE ALL APPLICABLE) (a) Fire wood for fuel..... (b) Foreage (c) Industries..... (d) Protection..... (e) Other purposes.....	Yes..... 1 No..... 2 Yes..... 1 No..... 2 Yes..... 1 No..... 2 Yes..... 1 No..... 2 Yes..... 1 No..... 2															
54.	Are you engaged in the following forestry industries? (CIRCLE ALL APPLICABLE) (a) Pulp making..... (b) Ply wood..... (c) Lumbering..... (d) Others (Specify).....	Yes..... 1 No..... 2 Yes..... 1 No..... 2 Yes..... 1 No..... 2 Yes..... 1 No..... 2															
55.	STOP INTERVIEW																

Enumerator
 Name: _____
 Sign: _____
 Date: _____

Supervisor
 Name: _____
 Sign: _____
 Date: _____